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## Electric Bicycles (e-bikes) Policy

<b>NAME OF POLICY:</b>	Electric Bicycles (e-bikes) Policy
<b>APPLICATION:</b>	This policy is intended to provide guidance to Recreation Sites and Trails BC staff on managing e-bikes on legally Established Recreation Trails.
<b>ISSUANCE:</b>	Director, Recreation Sites and Trails BC
<b>IMPLEMENTATION:</b>	Provincial
<b>REFERENCES:</b>	Forest and Range Practice Act   Forest Recreation Regulation   Motor Vehicle Act   Off Road Vehicle Act

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Date

## Preface

Electric bikes and electric mountain bikes (e-bikes) are a class of transportation / recreational bicycle that use an electric motor to either assist with propulsion or fully propel the user.

Recreation Sites and Trails BC (RSTBC) recognizes this new technology as an emerging use on Crown land. This policy was developed to classify and define e-bikes and to guide RSTBC staff in their decision making processes while addressing the potential opportunities, impacts and / or user conflicts that exist or may emerge as the technology continues to advance and e-bike use increases.

As one of the primary agencies responsible for public recreation on Crown land outside of parks and settled areas, RSTBC endeavors to accommodate the demand for recreational use of e-bikes; providing the use is properly located, does not result in significant user conflicts or environmental damage, and partnership agreement holders, where e-bike use is proposed, are willing to make a long-term commitment to manage the proposed use.

Concerns regarding the impacts of this new technology have been raised by RSTBC staff, partnership agreement holders, and the public. At present, there are few definitive research results to indicate direct impacts to the trail tread; however, there are some clear indicators suggesting impacts based solely on usage. RSTBC will continue to monitor ongoing research and incorporate the findings into future amendments to this policy.

Recognized increases in impacts from e-bike technology currently include:

- e-bikes allow users to cover more distance in a shorter period of time, which equates to higher levels of use and additional trail maintenance requirements.
- e-bikes remove some of the physical limitations inherent to mountain biking, thereby permitting some users to travel into areas that they might not otherwise be able to access. This suggests there may be higher numbers of users on backcountry trails accessing environmentally sensitive alpine areas and creating more wear on tread surfaces. Facilitating easier access into more remote areas may increase emergency / Search and Rescue calls for users who do not have the skills, knowledge or fitness necessary for the activity.

Policy implementation and regulatory enforcement will align with the ministry's existing enforcement framework and associated staff and budget levels. Implementation will be monitored and updated as needed to ensure that the policy is achieving its objectives.

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## POLICY STATEMENT

e-bikes are classified into various categories. Classes of e-bikes will be permitted or restricted on Established Recreation Trails based on considerations of safety, environmental impact and user experience. Decisions on e-bike use will be prioritized to local levels with input from stakeholders but may be influenced by provincial guidelines standards and best practices.

### 1. Policy Application

This document describes the RSTBC policy and procedures for the recreational use of e-bikes on Established Recreation Trails.

*Notes:*

1. Commercial e-bike guiding activities on Crown land (i.e., profit-oriented, fee-for-service operations) are managed under the Ministry's Adventure Tourism Policy.  
[[https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/adventure\\_tourism.pdf](https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/adventure_tourism.pdf)]
2. e-bike activities within Provincial Parks, Protected Areas, Conservancies, and Recreation Areas are managed by BC Parks.

### 2. References

The following references provide context and more information regarding recreational e-biking:

- (a) Forest Recreation Regulation (Forest and Range Practices Act)  
[[http://www.bclaws.ca/Recon/document/ID/freeside/16\\_2004](http://www.bclaws.ca/Recon/document/ID/freeside/16_2004)]
- (b) Motor Assisted Cycle Regulation (Motor Vehicle Act)  
[[http://www.bclaws.ca/civix/document/id/complete/statreg/151\\_2002](http://www.bclaws.ca/civix/document/id/complete/statreg/151_2002)]
- (c) Motor Vehicle Prohibition Regulation (Wildlife Act)  
[[http://www.bclaws.ca/civix/document/id/loo78/loo78/196\\_99#section1](http://www.bclaws.ca/civix/document/id/loo78/loo78/196_99#section1)]
- (d) Off Road Vehicle Regulation (Off Road Vehicle Act)  
[[http://www.bclaws.ca/civix/document/id/lc/statreg/193\\_2015](http://www.bclaws.ca/civix/document/id/lc/statreg/193_2015)]
- (e) US Forest Service E-bikes Briefing Paper  
[<http://flagstaffbiking.org/wp-content/uploads/2011/03/20150929E-bikesBriefingPaper.pdf>]
- (f) US Bureau of Land Management Information Bulletin No. 2015-060 – Electronic Powered Bicycles on Public Lands  
[<https://www.blm.gov/policy/ib-2015-060>]

### 3. Definitions

- (a) *Established Recreation Trail* – means a recreation trail established under section 56 of the *Forest and Range Practices Act*, section 6 of the *Forest Practices Code* of British Columbia Act or designated under the *Forest Act*.
- (b) *Recreation Officer* – The RSTBC District Recreation Officer who has statutory and delegated decision making authority for management of public recreation on Crown lands.
- (c) *Electric Bicycle (e-bike)* – A bicycle with an electric motor mounted either at the bottom bracket (mid-drive) or at either wheel hub, which provides power to the bicycle's drivetrain. Engagement of the motor varies from pedal feedback over a specific wattage to direct throttle control.
- (d) *Motor Assisted Cycle (MAC)* – is an e-bike that meets the definition of a Motor Assisted Cycle as defined in the Motor Assisted Cycle Regulation. For greater clarity, a MAC:
- i. Has maximum continuous power output ratings that in total do not exceed 500 watts and is capable of propelling the cycle no faster than 32 kilometers per hour on level ground without pedaling.
  - ii. Must be equipped with a mechanism that either:
    - allows the driver to turn the motor on and off, or
    - prevents the motor from turning on or engaging before the MAC attains a speed of 3 kilometers per hour
  - iii. Must disengage when the operator:
    - stops pedaling, or
    - releases the accelerator or
    - applies a brake.
  - iv. Cannot be gas-powered and must be electric powered.
  - v. Must be capable of being propelled by muscular power using the pedals, but it is not necessary to always be pedaling
- (e) *Motor Vehicle* – An e-bike is considered a Motor Vehicle if it meets the definition found in the *Motor Vehicle Act*. For greater clarity, any e-bike that does not meet the definition of a Motor Assisted Cycle is classified as a Motor Vehicle.
- (f) *Nominal Power* – The maximum continuous power output that an e-bike can produce without overheating the motor.
- (g) *Off Road Vehicle* – An e-bike that does not meet the definition of a Motor Assisted Cycle is classified as a motorcycle according to the Off Road Vehicle Regulation.
- (h) *Maximum Power* – The maximum power output that an e-bike motor can produce.
- (i) *Pedal Assist* – A mode of power engagement that requires pedaling feedback/input from the user to engage the motor.

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- (j) *Throttle* – A mode of power engagement that allows the user to engage the motor via a switch on the handlebar of the E-bike regardless of whether they are providing pedaling feedback/input.
  - (k) *Adaptive Mountain Bike (aMTB)* – A large category of wheeled recreational cycles consisting of hand cycles, recumbent leg cycles, tandem bicycles, etc. focused on providing specifically adapted opportunities for individuals who cannot use a two-wheeled bicycle due to disabilities, special needs, or other physical or neurological challenges.
  - (l) *Active Transportation Designation* – A potential designation permitted under Section 20(3) of the Forest Recreation Regulation (FRR) which identifies a specific trail for long-distance travel or commuting between communities, and is constructed to withstand higher volumes of travel by non-motorized recreational activities and e-bikes.

## 4. Abbreviations

aMTB	Adaptive Mountain Bike
DRO	District Recreation Officer
e-bike	Electric Bicycle
FRPA	<i>Forest and Range Practices Act</i>
FRR	Forest Recreation Regulation
FLNRORD	Ministry of Forest, Lands, Natural Resource Operations & Rural Development
MAC	Motor Assisted Cycle
RSTBC	The Recreation Sites and Trails BC branch of FLNRORD

## 5. Policy Goals

- (a) Recognize recreational e-biking as an allowable activity on Crown land where appropriate.
- (b) Classify e-biking activity and e-bikes relative to current trail uses and use restrictions. This includes guidance regarding aMTBs with electric assistance and the special rules pertaining to this category of recreationalist.
- (c) To support provision of e-bike opportunities on Crown land that accommodate rider demand for various types of e-bike trails, facilities and experiences, recognizing that user demand for new and varied types of riding experiences will continue to evolve over time.
- (d) Minimize impacts to Crown land by encouraging use on and around existing, established motorized or mixed-use recreation trail networks and infrastructure rather than new trail development in new areas.
- (e) To specifically support the prohibition of e-bike activities in areas closed to motor vehicles under the *Wildlife Act*, Motor Vehicle Prohibition Regulation where those closures were intended to include e-bikes as defined in this policy.

- (f) Manage safety hazards and risks associated with recreational e-bike activity on Crown land, and associated liability to the Province and other stakeholders.
- (g) Minimize potential conflicts on Crown land between recreational e-bike use and: (1) other recreational users, (2) other approved resource users, and (3) private property owners.
- (h) Minimize the potential impacts of e-bike activities on the environment and forest resource values.
- (i) Recognize a role for other partners/participants in responding to demands for e-bike riding experiences, including local governments and the private sector.

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## 6. e-bike Classification

RSTBC will rely on existing e-bike classifications and industry standards to maintain consistency with current provincial regulation, adjacent jurisdictions and manufacturing standards. Two categories of classifications will apply to e-bikes.

### 6.1 Standard e-bike Classification

#### *Class 1 e-bike*

A Class 1 e-bike means a bicycle equipped with a motor that provides assistance only when the rider is pedaling (pedal assist) and that ceases to provide assistance when the bicycle reaches 32 kilometers per hour and has a maximum continuous wattage output of 500 watts.

For the purposes of this policy a Class 1 e-bike meets the definition of a MAC.

### 6.2 Motorized e-bike Classification

#### *Class 2 e-bike*

A Class 2 e-bike means a bicycle equipped with a motor that can be used exclusively to propel the bicycle (throttle equipped) and that ceases to provide assistance when the bicycle reaches 32 kilometers per hour.

A class 2 e-bike is also a Motor Vehicle.

#### *Class 3 e-bike*

Class 3 e-bike means a bicycle equipped with a motor that provides assistance only when the rider is pedaling (pedal assist) and that ceases to provide assistance when the bicycle reaches 45 kilometers per hour.

A class 3 e-bike is also a Motor Vehicle.

## 7. Recreational e-bike Riding on Established Recreation Trails

### 7.1 Use of Established Recreation Trails

Recreational e-bike riding on Established Recreation Trails is a permitted activity unless either restricted or prohibited by a government order issued pursuant to section 58 of FRPA or by a sign posted in accordance with section 20(3) of the FRR or other enactments.

### 7.2 Default Designations

The following default designations apply unless specific exemptions, prohibitions or allowances are provided as described in section 7.1.

- (a) All classes of e-bikes are permitted on Established Recreation Trails open to both motorized and non-motorized use,
- (b) Class 1 e-bikes / MAC are permitted on Established Recreation Trails open to non-motorized use unless e-bikes are specifically prohibited.

- (c) Class 2 and 3 e-bikes are not permitted on Established Recreation Trails that prohibit motorized vehicles.
- (d) No e-bikes are permitted on Established Recreation Trails that prohibit bicycles unless an Established Recreation Trail is designated as single-use, e-bike only.
- (e) Where use restrictions are in place on Established Recreation Trails, and those restrictions are meant to prohibit a class of e-bike use, that class of e-bikes are prohibited on those trails.

### 7.3 Active Transportation Trails

A class of e-bike or all classes of e-bikes may be permitted on a non-motorized trail designated as an Active Transportation Trail.

### 7.4 Adaptive Mountain Bikes (aMTBs)

As defined in this policy, aMTBs that have electric motors are exempt from e-bike restrictions as long as they meet the following criteria:

- (a) Must have three or four wheels;
- (b) Must have the ability to propel the aMTB with hand cranks when without electric power;
- (c) The maximum nominal power wattage is set at 800W or less; and
- (d) The aMTB may have pedal assist and/or direct throttle power.

## 8. Recreational e-bike Designations

- 8.1 Orders and regulations that restrict or prohibit recreation activities on Crown land, including e-bike riding, will normally result from a stakeholder engagement process that has been undertaken to address safety, environmental impacts and user experience.
- 8.2 FRPA section 58 orders that restrict or prohibit recreation activities, including e-bike riding, on established sites, trails or interpretive forests will be issued according to the provisions of Part 2 of the FRR, and this will normally involve publication of the order in a local newspaper and physically posting the order in the area to which it applies.
- 8.3 Persons that use Established Recreation Trails must abide by applicable rules identified in Part 4 of the FRR to prevent user and resource conflicts and impacts. (See [http://www.qp.gov.bc.ca/statreg/reg/F/ForRangPrac/16\\_2004.htm](http://www.qp.gov.bc.ca/statreg/reg/F/ForRangPrac/16_2004.htm)). Users that contravene these rules may be served notice by the DRO or designated enforcement officers to vacate the recreational trail. For certain contraventions, the offence provisions of the FRR may apply (i.e., violation tickets, fines).
- 8.4 Other orders restricting e-bike use. Where orders on the land restricting e-bikes or motor vehicles overlap with legal site, trail or interpretive forest establishments, Recreation Officers have the ability to restrict e-bike usage so that management goals of the other order are aligned with management of the recreation resource.
- 8.5 Where prohibitions to motor vehicles are established under the *Wildlife Act*, and those prohibitions overlap legally established recreation sites, recreation trails or interpretive



forests, DROs have the ability to prohibit all or any class of e-bike use so that this policy aligns with wildlife and ecosystems management initiatives undertaken under the Wildlife Act.

## 9. Type and Term of Approval

- (a) e-bike riding is permitted on Established Recreation Trails unless restricted by the DRO under Section 20(3) of the FRR by the posting of a sign or symbol indicating no-e-bike use, no use by a particular class of e-bike, no motorized use, or by an order issued under Section 58 of FRPA indicating any of those uses are restricted.
- (b) Restrictions or exemptions from default designations pertaining to *e-bike Standard Classification* can be posted using the following signs or symbols:



- (c) Special authorizations may be provided by the DRO to individuals or partnership agreement holders to use an e-bike for authorized trail maintenance and construction projects. The term of this authorization should be linked to the term of the signed partnership agreement or other authorization. The DRO may also issue special authorizations for Search and Rescue organizations to use e-bikes during call-outs.
- (d) In addition to use designation under Section 56 of FRPA, e-bikes are subject to potential restrictions under the Wildlife Act including motorized closures and MAC specific closures that may also apply to class 1 e-bikes. Wherever possible, RSTBC will work to ensure that use designations align with any *Wildlife Act* closures in order to protect wildlife values as determined by Ecosystems Branch.

## 10. Enforcement

- (a) DROs will, within the level of available resources, monitor and inspect authorized trail use and assess compliance with e-bike classes, existing use restrictions and Active Transportation designations. If enforceable contraventions are identified, the DRO may issue a verbal warning or a written notification to the offender / agreement holder, or the issue may be reported to Natural Resource Officer(s) or other enforcement agencies for the issuance of tickets or other penalties as determined by said officer / agency.

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## 11. Recreation Planning

- (a) Where trail use or resource conflict issues emerge on multi-use trails, DROs may initiate a recreation trail planning process to work with local users and interest groups to identify solutions (e.g., voluntary collaborative agreements to accommodate different users' interests and minimize trail use conflicts).
- (b) Where legally established trails exist with existing use patterns and partnership agreement holders the DRO's may choose to restrict e-bike use subject to a planning process as described in 11(a)
- (c) DROs may participate, where resources allow, in inter-agency integrated land and resource planning initiatives to ensure that e-biking trail opportunities are considered in planning and to identify areas with e-biking trail potential/suitability.

## 12. Monitoring and Policy Update Cycle

RSTBC will test the effectiveness of this policy throughout the province from 2018-2021. The intent is to enable learning through experience prior to policy adjustment. Adjustments to the policy will be based on the following considerations:

- Implementation costs (for both RSTBC and partner organizations);
- Quantifiable increased trail maintenance burden resulting from e-bike use;
- The level and nature of use on trails authorized for e-biking;
- The incidence and nature of safety issues and responses;
- Partnership agreement holder compliance with safety-related requirements / standards;
- The incidence and nature of trail use conflicts and responses;
- The incidence and nature of undesirable environmental impacts from e-bike trail use; and
- Other observations about the effectiveness of the policy and suggestions for policy improvement.